Dehumidification Equipment

DHP Dehumidification PAC Units

DHP2500P3 Technical Data

Technical Specifications

	DHP2500-55P3	DHP2500-75P3	DHP2500-107P3
DESIGN TO SUIT STANDARD CONDITIONS IN	PERTH/ ADELAIDE	MELBOURNE/ SYDNEY	BRISBANE/ NTH QLD
Nominal Airflow			
Supply Air (l/sec)	2500	2500	2500
Fresh Air (l/sec)	2500	2500	2500
Condensor Air (l/sec)	4400	6000	8560
Compressor Capacity (kW)	55	75	107
Supply Fan			
Fan Type	Plug Fan	Plug Fan	Plug Fan
Fan Motor	EC Motor	EC Motor	EC Motor
Motor Power (Watts)	2825	2825	2825
External Static (Pa)	250	250	250
Fan Diameter (mm)	450	450	450
Number of Fans	1	1	1
Condenser Fan			
Fan Type	Axial Fan	Axial Fan	Axial Fan
Fan Motor	EC Motor	EC Motor	EC Motor
Motor Power (Watts)	1950	1950	1950
Number of Fans	1	1	2
Condensor Fan Control	Head Pressure Controlled	Head Pressure Controlled	Head Pressure Controlled
Electrical			
Supply Fan FLA (A)	6.8 - 6.8 - 6.8	6.8 - 6.8 - 6.8	6.8 - 6.8 - 6.8
Condenser Fan FLA (A)	3.1 – 3.1 – 3.1	3.1 – 3.1 – 3.1	6.2 – 6.2 – 6.2
Compressor Current (A)	32 - 32 - 32	41 - 41 - 41	59 - 59 - 59
Nominal Run Current (A)	41.9 - 41.9 - 41.9	50.9 - 50.9 - 50.9	72 - 72 - 72
Maximum Run Current (A)	52 - 52 - 52	64 - 64 - 64	93 - 93 - 93
Volt/Phase	415V/3ph	415V/3ph	415V/3ph
Switchboard	Yes	Yes	Yes
Circuit Breakers	Yes	Yes	Yes
Controls			
0-10V DC (Supply Fan Control)	Included	Included	Included
0-10V DC (Compressor Capacity)	Included	Included	Included
Compressor Fault	Low Level	Low Level	Low Level
Fan Fault Signal	24V Output	24V Output	24V Output
Fan Status	Optional	Optional	Optional
Bypass Supply Air Damper	Included	Included	Included
Compressor Enable 24V	Included	Included	Included
PC-20CC Low Level Controller	Optional	Optional	Optional
PC-30CC High Level Controller	Optional	Optional	Optional

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armcor air solutions

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DESIGN TO SUIT STANDARD CONDITIONS IN	PERTH/ ADELAIDE	MELBOURNE/ SYDNEY	BRISBANE/ NTH QLD
Heat Exchanger	*Rated at standard conditions of 35.5° db/24.0° wb		
Sensible Media	Standard	Standard	Standard
Face Velocity (m/sec)	2.0	2.0	2.0
Media Access	Removable	Removable	Removable
Pressure Drop (Pa)	95	95	95
Cabinet Construction			
Colourbond Casing	50mm Panel	50mm Panel	50mm Panel
Galvanised Base	100x50	100x50	100x50
Design Temperatures			
Ambient Summer (DB/WB)	40°C/27°C	35°C/24°C	35°C/27°C
Supply Air Summer (DB/WB)	24°C/17°C	24°C/17°C	24°C/17°C
Supply Air Moisture Content (g/kg)	9.4	9.4	9.4
Ambient Winter (DB)	5°C	3°C	5°C
Supply Air Winter (DB)	21°C	21°C	21°C
Coil Selection			
Indoor Coil Circuits	1	1	2
Face Velocity (m/sec)	2.06	2.06	2.06
Coil Coating	Included	Included	Included
Drain Tray	Stainless Steel	Stainless Steel	Stainless Steel
Compressor Details			
Total Cooling Capacity (kW)	55	75	107
Sensible Capacity (kW)	37	41	41
Latent Capacity (kW)	18	34	66
No. of Compressor	1	1	2
Compressor Type	Inverter 10-100% Capacity	Inverter 10-100% Capacity	Inverter 10-100% Capacity
Refrigerant Gas	R410A	R410A	R410A
Expansion Device	Electronic EV	Electronic EV	Electronic EV
Total Heating Capacity (kW)	55	71	67
Filters			
Filter Type	F5 Deep Bed Filter	F5 Deep Bed Filter	F5 Deep Bed Filter
Number of Filters / Size	3/600 x 600 x 380d	3/600 x 600 x 380d	3/600 x 600 x 380d
Option			
Corrosion Resistant Lining	Available	Available	Available

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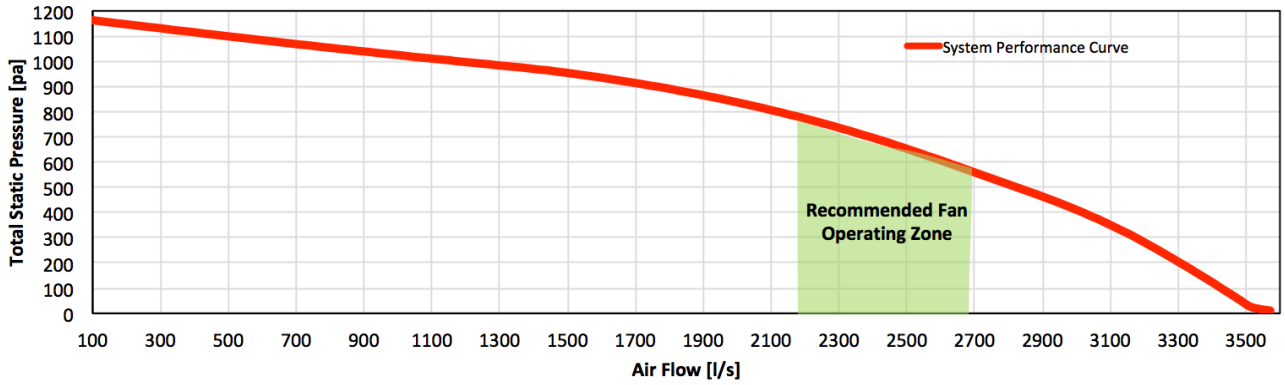
Fan Performance Data



Sound Power Levels

*Sound power levels at 650 Pa Total Static Pressure and 2500 L/s Total Air Volume

Inlet Rating dB		Outlet Rating dB	
63 Hz	68.4	63 Hz	70.8
125 Hz	66.2	125 Hz	67.9
250 Hz	80.1	250 Hz	77.8
500 Hz	75.2	500 Hz	79.2
1K Hz	71.3	1K Hz	81.4
2K Hz	72.9	2K Hz	79.5
4K Hz	69	4K Hz	74.4
8K Hz	68.1	8K Hz	71.5
LwA	79.2	LwA	85.4

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